



**Rig Name:** Sedco 709

**Rig Type:** Semi Submersible

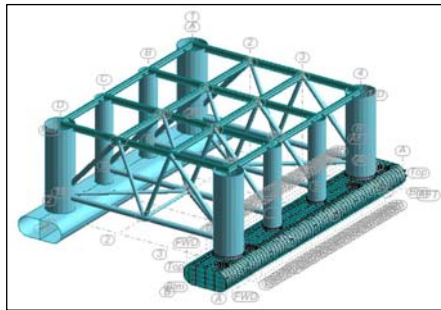
**Owner name:** Transocean Inc.

**Classification Society:** ABS

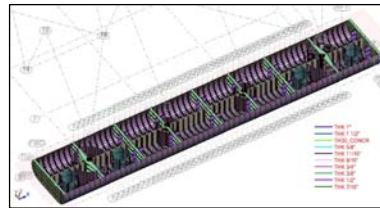
**Pertinent code:** ABS Modu

**Project description:** Structural assessment for moving Sedco 700 and Sedco 709 in tandem, on board Dockwise's Blue Marlin Vessel was done for dry tow purpose to repair facility in Far East. Additional assessment was also done to put Sedco 709 on repair barge on route to S Africa protected water where the Special Periodical Survey and associated repair was conducted. Operating and storm condition were checked in accordance with owner and warranty surveyor's requirements.

### FEA Model



Rig Structure



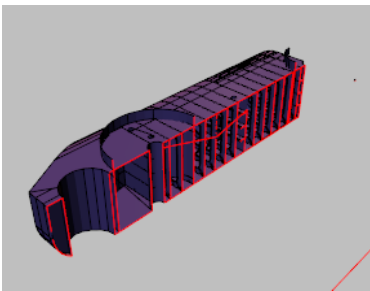
Pontoon Structure



Pontoon Overhang Carrier Vessel

**R.E. scope of work**  
Rig Engineering has been tasked with screening of suitable barge, vessel and dumb barge for the use of construction / repair works and dry tow purpose leading to final assessment and sea fastening of vessel to deck. FEA model of the hull, column and bracings were made and loaded with local and global loads provided by owners and barge's owners. Strength check of internal dividing bulkhead, ring frame, all major structural connection were done and suitable cribbing plan issued for construction. Reactions to deck were supplied to barge owners and dry transporting company, for structural adequacy check on their vessels. Technical reports were then submitted to owners and class as required.

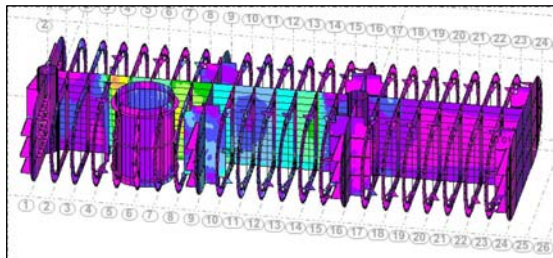
**Click below to see 3D model!**



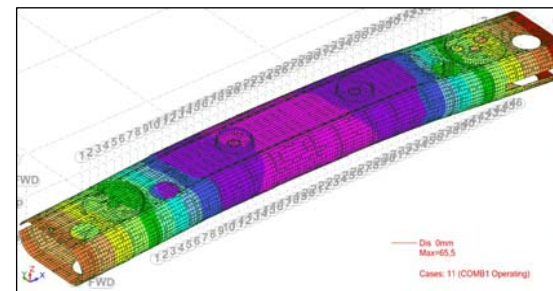
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### Results



Pontoon Structure Stress Plot



Pontoon Deflection Plot

### Engagement Condition

Upload your problem to us and give us relevant input to allow us to resolve your problem, we will need:

1. As built of structure to create 3D FEA model.
2. Static and environmental loads of rig.
3. Barge detailed information and stability characteristic.

Key word: Sedco 709 Rig Engineering, dry tow, semi sitting on repair barge, pontoon strength check, hull blocking assessment, global strength check during tow and storm condition while on transportation vessel, barge or repair barge.